

ABSTRACT

**MRAM ARRAY EMPLOYING SPIN-FILTERING ELEMENT
CONNECTED BY SPIN-HOLS ELEMENT TO MRAM CELL STRUCTURE
FOR ENHANCED MAGNETORESISTANCE**

An MRAM array having enhanced magnetoresistance includes a spin filtering element connected by a spin hold element to the MRAM cell structures. A spin filtering element may serve several MRAM cell structures, by connecting the spin filtering element to a series of MRAM cell structures by a spin hold wire, or a spin filtering element and a spin hold element may be formed as adjacent layers in each MRAM cell stack.